	Application No.	Applicant(s)
Notice of Allowability	09/508,658	KROHN ET AL.
	Examiner	Art Unit	
	Jehanne S. Sitton	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _10/2/2006_.

2. ☒ The allowed claim(s) is/are _27,36 and 37_.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

       Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _7/06, 3/00_

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☒ Other _Alignment of instant Seq ID No: 1 w/ Seq ID No: 1 of US Patent 6,951,928_

REASONS FOR ALLOWANCE

1.   The following is an examiner's statement of reasons for allowance: The claims are drawn

to an isolated nucleic acid molecule comprising the sequence of SEQ ID NO: 1, as well as

isolated nucleic acid molecules comprising SEQ ID NO: 1 where position 905 is a T instead of a

C, or where position 383 is a G instead of an A. The prior art does not teach or fairly suggest the

sequence of these nucleic acid molecules. Support for the nucleotide alterations is in SEQ ID

NO: 1 as well as figure 3A, B, and C, (alignment of the sequences for the sequencing results with

SEQ ID NO: 1). Support for the amendments to the specification and the drawings (Figure 2) to

change K42E to K83E is in Figure 3C, which contains the data for the sequencing reaction to

determine the mutation at position 383 of SEQ ID NO: 1. Alignment of the nucleotides

surrounding the mutant position with SEQ ID NO: 1 reveals that the designation of codon 42 was

incorrect and that the correct codon is 83. Accordingly, one of skill in the art would not only

recognize that the designation of codon 42 in the specification was an obvious error, but would

also recognize the appropriate correction. MPEP 2163.07 II. SEQ ID NO: 1 and Figures 3A,

3B, and 3C are supported in all previous priority documents.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Response to Request for Declaration of Interference Pursuant to 37 CFR 41.202

2.   In the reply filed 10/2/2006, applications suggested that and interference be declared

between instant claims 27 and 36 and claims 2-4 of US Patent 6,951,928. The remarks as well as

the claims of the instant specification and those of the '928 patent, as well as the specification of

each, have been thoroughly reviewed. However, the claims in the instant application and those

of the '928 Peltonen patent fail the two way test for the following reasons. 41.203 (a) states:

"Interfering subject matter. An interference exists if the subject matter of a claim of one party

would, if prior art, <u>have anticipated or rendered obvious the subject matter of a claim of the</u>

<u>opposing party and vice versa.</u>"

SEQ ID NO: 1 of the instant application and SEQ ID NO: 1 of the '928 patent are not

identical. An alignment is provided.

Instant SEQ ID NO: 1, the subject matter of claims 27 and 36, contains 16 nucleotides on

the 5' end which are not taught or suggested by SEQ ID NO: 1 of the '928 patent, the claims of

the '928 patent, nor the disclosure of the '928 patent. Therefore, (with regard to the comments

regarding count 1 at pages 3-5 of the response), none of the claims of the '928 patent either

anticipate or are obvious over the nucleic acid molecule of instant claim 27, that is an isolated

nucleic acid molecule comprising instant SEQ ID NO: 1, or the nucleic acids in claims 36 (count

2 suggested by applicant) and 37 of the instant application. On this basis, the claims fail the two

way test and an interference has not been declared.

Also of note, SEQ ID NO: 1 of the '928 patent contains 25 nucleotides on the 3' end

which are not taught or suggested by instant SEQ ID NO:1, claims 27, 36, or 37, or the

disclosure of the instant specification. Additionally, a mismatch occurs at position 817 (C) of

instant SEQ ID NO: 1 and position 801 (T) of SEQ ID NO: 1 of the '928 patent, accordingly, the

sequences of instant SEQ ID NO: 1 and SEQ ID NO: 1 of the '928 patent are not identical.

Therefore claims 27, 36, and 37 of instant application are allowed.

3.　　　Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jehanne Sitton whose telephone number is (571) 272-0752. The examiner can normally be reached Monday-Thursday from 8:00 AM to 5:00 PM and on alternate Fridays.

　　　If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached on (571) 272-0735. The fax phone number for this Group is (571) 273-8300.

　　　Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

　　　Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

　　　For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Jehanne Sitton
Primary Examiner
Art Unit 1634

1/4/07

US-09-509-595B-1
; Sequence 1, Application US/09509595B
; Patent No. 6951928
; GENERAL INFORMATION:
; APPLICANT: MAX-PLANCK-GESELLSCHAFT ZUR FORDERUNG DER WISSENSCHAFTEN E.V.
; APPLICANT: NATIONAL PUBLIC HEALTH INSTITUTE
; APPLICANT: PELTONEN, Leena
; APPLICANT: AALTONEN, Johanna
; APPLICANT: BJORSES, Petra
; APPLICANT: PERHEENTUPA, Jaakko
; APPLICANT: PALOTIE, Aarno
; APPLICANT: HORELLI-KUITUNEN, Nina
; APPLICANT: YASPO, Marie-Laure
; APPLICANT: LEHRACH, Hans
; TITLE OF INVENTION: NUCLEIC ACID MOLECULE ENCODING A (POLY)PEPTIDE CO-
SEGREGATING IN MUTATED
; TITLE OF INVENTION: FORM WITH AUTOIMMUNE POLYENDOCRINOPATHY CANDIDIASIS
ECTODERMAL DYSTROPHY
; TITLE OF INVENTION: (APECED)
; FILE REFERENCE: VOSS1130
; CURRENT APPLICATION NUMBER: US/09/509,595B
; CURRENT FILING DATE: 2000-07-05
; PRIOR APPLICATION NUMBER: EP 97117154.1
; PRIOR FILING DATE: 1997-10-02
; PRIOR APPLICATION NUMBER: EP 97117398.4
; PRIOR FILING DATE: 1997-10-08
; PRIOR APPLICATION NUMBER: EP 97119810.6
; PRIOR FILING DATE: 1997-11-12
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
;   LENGTH: 2245
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (121)..(1758)
;   OTHER INFORMATION:
US-09-509-595B-1

  Query Match   99.1%; Score 2018.4; DB 3; Length 2245;
  Best Local Similarity 99.9%; Pred. No. 0;
  Matches 2019; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

Qy   17 CGGGCGCACAGCCGGCGCGGAGGCCCCACAGCCCCGCCGGGACCCGAGGCCAAGCGAGGG 76
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1 CGGGCGCACAGCCGGCGCGGAGGCCCCACAGCCCCGCCGGGACCCGAGGCCAAGCGAGGG 60

Qy   77 GCTGCCAGTGTCCCGGGACCCACCGCGTCCGCCCCAGCCCCGGGTCCCCGCGCCCACCCC 136
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   61 GCTGCCAGTGTCCCGGGACCCACCGCGTCCGCCCCAGCCCCGGGTCCCCGCGCCCACCCC 120

Qy   137 ATGGCGACGGACGCGGCGCTACGCCGGCTTCTGAGGCTGCACCGCACGGAGATCGCGGTG 196
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   121 ATGGCGACGGACGCGGCGCTACGCCGGCTTCTGAGGCTGCACCGCACGGAGATCGCGGTG 180

Qy   197 GCCGTGGACAGCGCCTTCCCACTGCTGCACGCGCTGGCTGACCACGACGTGGTCCCCGAG 256

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            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     181  GCCGTGGACAGCGCCTTCCCACTGCTGCACGCGCTGGCTGACCACGACGTGGTCCCCGAG  240

Qy     257  GACAAGTTTCAGGAGACGCTTCATCTGAAGGAAAAGGAGGGCTGCCCCCAGGCCTTCCAC  316
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     241  GACAAGTTTCAGGAGACGCTTCATCTGAAGGAAAAGGAGGGCTGCCCCCAGGCCTTCCAC  300

Qy     317  GCCCTCCTGTCCTGGCTGCTGACCCAGGACTCCACAGCCATCCTGGACTTCTGGAGGGTG  376
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     301  GCCCTCCTGTCCTGGCTGCTGACCCAGGACTCCACAGCCATCCTGGACTTCTGGAGGGTG  360

Qy     377  CTGTTCAAGGACTACAACCTGGAGCGCTATGGCCGGCTGCAGCCCATCCTGGACAGCTTC  436
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     361  CTGTTCAAGGACTACAACCTGGAGCGCTATGGCCGGCTGCAGCCCATCCTGGACAGCTTC  420

Qy     437  CCCAAAGATGTGGACCTCAGCCAGCCCCGGAAGGGGAGGAAGCCCCCGGCCGTCCCCAAG  496
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     421  CCCAAAGATGTGGACCTCAGCCAGCCCCGGAAGGGGAGGAAGCCCCCGGCCGTCCCCAAG  480

Qy     497  GCTTTGGTACCGCCACCCAGACTCCCCACCAAGAGGAAGGCCTCAGAAGAGGCTCGAGCT  556
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     481  GCTTTGGTACCGCCACCCAGACTCCCCACCAAGAGGAAGGCCTCAGAAGAGGCTCGAGCT  540

Qy     557  GCCGCGCCAGCAGCCCTGACTCCAAGGGGCACCGCCAGCCCAGGCTCTCAACTGAAGGCC  616
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     541  GCCGCGCCAGCAGCCCTGACTCCAAGGGGCACCGCCAGCCCAGGCTCTCAACTGAAGGCC  600

Qy     617  AAGCCCCCCAAGAAGCCGGAGAGCAGCGCAGAGCAGCAGCGCCTTCCACTCGGGAACGGG  676
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     601  AAGCCCCCCAAGAAGCCGGAGAGCAGCGCAGAGCAGCAGCGCCTTCCACTCGGGAACGGG  660

Qy     677  ATTCAGACCATGTCAGCTTCAGTCCAGAGAGCTGTGGCCATGTCCTCCGGGGACGTCCCG  736
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     661  ATTCAGACCATGTCAGCTTCAGTCCAGAGAGCTGTGGCCATGTCCTCCGGGGACGTCCCG  720

Qy     737  GGAGCCCGAGGGGCCGTGGAGGGGATCCTCATCCAGCAGGTGTTTGAGTCAGGCGGCTCC  796
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     721  GGAGCCCGAGGGGCCGTGGAGGGGATCCTCATCCAGCAGGTGTTTGAGTCAGGCGGCTCC  780

Qy     797  AAGAAGTGCATCCAGGTTGGCGGGGAGTTCTACACTCCCAGCAAGTTCGAAGACTCCGGC  856
            |||||||||||||||||||||| |||||||||||||||||||||||||||||||||||||
Db     781  AAGAAGTGCATCCAGGTTGGTGGGGAGTTCTACACTCCCAGCAAGTTCGAAGACTCCGGC  840

Qy     857  AGTGGGAAGAACAAGGCCCGCAGCAGCAGTGGCCCGAAGCCTCTGGTTCGAGCCAAGGGA  916
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     841  AGTGGGAAGAACAAGGCCCGCAGCAGCAGTGGCCCGAAGCCTCTGGTTCGAGCCAAGGGA  900

Qy     917  GCCCAGGGCGCTGCCCCCGGTGGAGGTGAGGCTAGGCTGGGCCAGCAGGGCAGCGTTCCC  976
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     901  GCCCAGGGCGCTGCCCCCGGTGGAGGTGAGGCTAGGCTGGGCCAGCAGGGCAGCGTTCCC  960

Qy     977  GCCCCTCTGGCCCTCCCCAGTGACCCCCAGCTCCACCAGAAGAATGAGGACGAGTGTGCC  1036
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     961  GCCCCTCTGGCCCTCCCCAGTGACCCCCAGCTCCACCAGAAGAATGAGGACGAGTGTGCC  1020

Qy    1037  GTGTGTCGGGACGGCGGGGAGCTCATCTGCTGTGACGGCTGCCCTCGGGCCTTCCACCTG  1096
            |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db     1021 GTGTGTCGGGACGGCGGGGAGCTCATCTGCTGTGACGGCTGCCCTCGGGCCTTCCACCTG 1080

Qy     1097 GCCTGCCTGTCCCCTCCGCTCCGGGAGATCCCCAGTGGGACCTGGAGGTGCTCCAGCTGC 1156
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1081 GCCTGCCTGTCCCCTCCGCTCCGGGAGATCCCCAGTGGGACCTGGAGGTGCTCCAGCTGC 1140

Qy     1157 CTGCAGGCAACAGTCCAGGAGGTGCAGCCCCGGGCAGAGGAGCCCCGGCCCCAGGAGCCA 1216
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1141 CTGCAGGCAACAGTCCAGGAGGTGCAGCCCCGGGCAGAGGAGCCCCGGCCCCAGGAGCCA 1200

Qy     1217 CCCGTGGAGACCCCGCTCCCCCCGGGGCTTAGGTCGGCGGGAGAGGAGGTAAGAGGTCCA 1276
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1201 CCCGTGGAGACCCCGCTCCCCCCGGGGCTTAGGTCGGCGGGAGAGGAGGTAAGAGGTCCA 1260

Qy     1277 CCTGGGGAACCCCTAGCCGGCATGGACACGACTCTTGTCTACAAGCACCTGCCGGCTCCG 1336
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1261 CCTGGGGAACCCCTAGCCGGCATGGACACGACTCTTGTCTACAAGCACCTGCCGGCTCCG 1320

Qy     1337 CCTTCTGCAGCCCCGCTGCCAGGGCTGGACTCCTCGGCCCTGCACCCCCTACTGTGTGTG 1396
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1321 CCTTCTGCAGCCCCGCTGCCAGGGCTGGACTCCTCGGCCCTGCACCCCCTACTGTGTGTG 1380

Qy     1397 GGTCCTGAGGGTCAGCAGAACCTGGCTCCTGGTGCGCGTTGCGGGGTGTGCGGAGATGGT 1456
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1381 GGTCCTGAGGGTCAGCAGAACCTGGCTCCTGGTGCGCGTTGCGGGGTGTGCGGAGATGGT 1440

Qy     1457 ACGGACGTGCTGCGGTGTACTCACTGCGCCGCTGCCTTCCACTGGCGCTGCCACTTCCCA 1516
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1441 ACGGACGTGCTGCGGTGTACTCACTGCGCCGCTGCCTTCCACTGGCGCTGCCACTTCCCA 1500

Qy     1517 GCCGGCACCTCCCGGCCCGGGACGGGCCTGCGCTGCAGATCCTGCTCAGGAGACGTGACC 1576
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1501 GCCGGCACCTCCCGGCCCGGGACGGGCCTGCGCTGCAGATCCTGCTCAGGAGACGTGACC 1560

Qy     1577 CCAGCCCCTGTGGAGGGGGTGCTGGCCCCCAGCCCCGCCCGCCTGGCCCCTGGGCCTGCC 1636
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1561 CCAGCCCCTGTGGAGGGGGTGCTGGCCCCCAGCCCCGCCCGCCTGGCCCCTGGGCCTGCC 1620

Qy     1637 AAGGATGACACTGCCAGTCACGAGCCCGCTCTGCACAGGGATGACCTGGAGTCCCTTCTG 1696
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1621 AAGGATGACACTGCCAGTCACGAGCCCGCTCTGCACAGGGATGACCTGGAGTCCCTTCTG 1680

Qy     1697 AGCGAGCACACCTTCGATGGCATCCTGCAGTGGGCCATCCAGAGCATGGCCCGTCCGGCG 1756
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1681 AGCGAGCACACCTTCGATGGCATCCTGCAGTGGGCCATCCAGAGCATGGCCCGTCCGGCG 1740

Qy     1757 GCCCCCTTCCCCTCCTGACCCCAGATGGCCGGGACATGCAGCTCTGATGAGAGAGTGCTG 1816
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1741 GCCCCCTTCCCCTCCTGACCCCAGATGGCCGGGACATGCAGCTCTGATGAGAGAGTGCTG 1800

Qy     1817 AGAAGGACACCTCCTTCCTCAGTCCTGGAAGCCGGCCGGCTGGGATCAAGAAGGGGACAG 1876
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1801 AGAAGGACACCTCCTTCCTCAGTCCTGGAAGCCGGCCGGCTGGGATCAAGAAGGGGACAG 1860

Qy     1877 CGCCACCTCTTGTCAGTGCTCGGCTGTAAACAGCTCTGTGTTTCTGGGGACACCAGCCAT 1936
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1861 CGCCACCTCTTGTCAGTGCTCGGCTGTAAACAGCTCTGTGTTTCTGGGGACACCAGCCAT 1920
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Qy      1937  CATGTGCCTGGAAATTAAACCCTGCCCCACTTCTCTACTCTGGAAGTCCCCGGGAGCCTC 1996
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1921  CATGTGCCTGGAÀATTAAACCCTGCCCCACTTCTCTACTCTGGAAGTCCCCGGGAGCCTC 1980

Qy      1997  TCCTTGCCTGGTGACCTACTAAAAATATAAAAATTAGCTG 2036
              ||||||||||||||||||||||||||||||||||||||||
Db      1981  TCCTTGCCTGGTGACCTACTAAAAATATAAAAATTAGCTG 2020
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